

to compare the respective voice powers, and to delete the voice packets in the ascending order of power. Fig. 3 shows a curve that indicates voice power obtained by decoding the voice packets P1 to P102, in which the voice packets within a range in the vicinity of the voice packet P1 lowest in power, which is shown by oblique lines, are deleted.

It is a second method to decode the voice packets so as to compare the respective voice powers, for example, with the power at voice absence as a threshold, thereafter retrieve each voice packet whose voice power is below the threshold, and delete voice packets from among the retrieved packets at predetermined intervals or at random. Fig. 4 shows a curve that indicates voice power obtained by decoding the voice packets P1 to P102, in which powerless voice packets with predetermined frequency between the voice packets P1 and P102, which is shown by oblique lines, are deleted.

It is a third method to decode the voice packets so as to compare the respective voice powers, for example, with the power at voice absence as a threshold, thereafter retrieve each voice packet whose voice power is below the threshold, and delete voice packets from among the retrieved packets in accordance with the length of a part below the threshold. Fig. 5 shows a curve that indicates voice power obtained by decoding the voice packets P1 to P102, in which voice packets are deleted that are included in duration "a" and duration "b" shown by the oblique lines

that are proportionate to length "A" and length "B", respectively, of a part consisting of packets lower in power than the threshold between the voice packets P1 and P102.

It is a fourth method to decode the voice packets so as to compare the respective voice powers, for example, with the power at voice absence as a threshold, thereafter retrieve each voice packet whose voice power is below the threshold, and delete voice packets in accordance with the length of a part below the threshold that are included in a most powerless part below the threshold from among the retrieved packets. Fig. 6 shows a curve that indicates voice power obtained by decoding the voice packets P1 to P102, in which voice packets are deleted that are included in duration "c" and duration "d" shown by the oblique lines that are proportionate to length "C" and length "D", respectively, of a part consisting of packets lower in power than the threshold between the voice packets P1 and P102 and that are the most powerless voice packets.

For example, if the judgment result DC is that the voice packets P1 to P5 and P98 to P102 are voice absence among the voice packets P1 to P102 and if the number (deletion number) of voice packets to be deleted is three, the voice packets P4, P99, and P101, for example, are deleted, and a queue whose queue length is 102 packets made up of the voice packets P1 to P102 is converted into a queue whose queue length is 99 packets made up of the voice

packets P1, P2, P3, P5 to P98, P100, and P102.

How to determine the deletion number is a problem. In consideration of the fact that deletion is a cause of deterioration in the decoded voice output, it might be preferable to fix the deletion number at a bare minimum (i.e., the minimum deletion number where the queue length does not exceed the higher threshold TH).

However, there is a case where the queue length that has once fallen below the higher threshold TH by the deletion frequently exceeds the higher threshold TH again because of a reduction in the deletion number, and an excessive load is imposed on the processing of the packet deleting device 20 or the voice presence/absence judging device 21 in relation to the reading of the scanning signal SC. There is a solution in this case to increase the deletion number and reduce the load.

In this embodiment, it is possible to analyze not only the voice packet occupying the top position (i.e., the voice packet that corresponds to the voice packet P1 of Fig. 2) but also a voice packet group made up of a great number of voice packets that constitute a queue, and determine voice packets to be deleted on the basis of the analytic result. Therefore, the positions of the voice packets to be deleted can be dispersed on the queue.

On the other hand, the queue length of one packet will change as a result of the present reading, and a packet to be read will not exist in the next reading after the lapse